

Mark A

1. A candle comprising:

a first portion formed of a candle base material;
a second portion in contact with the first portion, the second portion including at least one flame retardant and being substantially resistant to burning; and
a wick inside the candle.

2. The candle of claim 1, wherein the flame retardant is an inorganic compound, an organometallic compound, an organic compound, or a mixture thereof.

3. The candle of claim 1, wherein the flame retardant is liquid, solid, or semi-solid.

4. The candle of claim 1, wherein the flame retardant is hydrophobic silica or liquid silicone.

5. The candle of claim 1, wherein the flame retardant is selected from the group consisting of alumina trihydrate, magnesium hydroxide, magnesium carbonate, calcium carbonate, boric acid, antimony trioxide, and a mixture thereof.

6. The candle of claim 1, wherein the flame retardant is a phosphorus-containing or sulfur-containing compound.

7. The candle of claim 6, wherein the flame retardant is tri-(2,3-dibromopropyl) phosphate, ammonium phosphate, or bis(bromochloropropyl) bromochloropropyl phosphonate.

8. The candle of claim 1, wherein the flame retardant is chlorinated paraffin, polybrominated diphenyloxide, decarbromophenoxybenzene, tetrabromobisphenol A, hexabromocyclododecane, or tetrabromophthlic anhydride.

9. The candle of claim 1, wherein the first portion of the candle is transparent or substantially transparent.

Page 10 of 27

Claim 15/16

10. The candle of claim 1, wherein the first portion of the candle is opaque or substantially opaque.

11. The candle of claim 1, wherein the first portion of the candle is translucent.

12. The candle of claim 1, wherein the first portion of the candle is capable of undergoing a phase transition from opaque to substantially transparent when the candle is lit.

13. The candle of claim 1, wherein the candle base material includes a wax.

14. The candle of claim 13, wherein the wax is paraffin wax, beeswax, animal wax, vegetable wax, mineral wax, synthetic wax, or a mixture thereof.

15. The candle of claim 1, wherein the candle base material includes a wax and a gelling agent.

16. The candle of claim 15, wherein the gelling agent is a di-block copolymer, tri-block copolymer, radial copolymer, star polymer, multi-block copolymer, or a mixture thereof.

17. The candle of claim 1, wherein the first portion of the candle further includes a hydrocarbon oil in the candle base material.

18. The candle of claim 1, wherein the first portion of the candle further includes an additive in the candle base material.

19. The candle of claim 18, wherein the additive is an antioxidant, stabilizer, fragrance, colorant, insect repellent, or a mixture thereof.

20. The candle of claim 1, wherein the first portion of the candle further includes an object. (1), B

21. The candle of claim 20, wherein the object is an insoluble star, glitter, sparkle, ribbon, or a combination thereof.

22. The candle of claim 1, wherein the candle is free-standing.

~~23. The candle of claim 1, wherein the candle is contained in a jar.~~

~~24. A self-extinguishing candle, comprising:
a candle body formed of a paraffin wax; the candle body being opaque or
substantially opaque,
a wick inside the candle body for sustaining a candle flame when lit, and
a flame-resistant block in contact with one end of the candle body, the flame-resistant
block including at least one flame retardant and being capable of extinguishing the candle
flame after the candle body is substantially consumed by the candle flame.~~

25. A method of making a self-extinguishing candle comprising:
forming a candle body from a candle base material;
forming a flame-resistant block from at least one flame retardant; and
joining the flame-resistant block to the candle body.

26. The method of claim 25, wherein the flame retardant is an inorganic compound, an organometallic compound, an organic compound, or a mixture thereof.

27. The method of claim 25, wherein the flame retardant is liquid, solid, or semi-solid.

28. The method of claim 25, wherein the flame retardant is hydrophobic silica or liquid silicone.

29. The method of claim 25, wherein the flame retardant is selected from the group consisting of alumina trihydrate, magnesium hydroxide, magnesium carbonate, calcium carbonate, boric acid, antimony trioxide, and a mixture thereof.

30. The method of claim 25, wherein the flame retardant is a phosphorus-containing or sulfur-containing compound.

Self Ad

31. The candle of claim 30, wherein the flame retardant is tri-(2,3-dibromopropyl) phosphate, ammonium phosphate, or bis(bromochloropropyl) bromochloropropyl phosphonate.

32. The method of claim 25, wherein the flame retardant is chlorinated paraffin, polybrominated diphenyloxide, decarbromophenoxybenzene, tetrabromobisphenol A, hexabromocyclododecane, or tetrabromophthlic anhydride.

33. The method of claim 25, wherein the candle body is transparent or substantially transparent.

34. The method of claim 25, wherein the candle body is opaque or substantially opaque.

35. The method of claim 25, wherein the candle body is translucent.

36. The method of claim 25, wherein the candle body is capable of undergoing a phase transition from opaque to substantially transparent when the candle is lit.

37. The method of claim 25, wherein the candle base material includes a wax.

Self Ad

38. The candle of claim 37, wherein the wax is paraffin wax, beeswax, animal wax, vegetable wax, mineral wax, synthetic wax, or a mixture thereof.

39. The method of claim 25, wherein the candle base material includes a wax and a gelling agent.

40. ~~The candle of claim 39, wherein the gelling agent is a di-block copolymer, tri-block copolymer, radial copolymer, star polymer, multi-block copolymer, or a mixture thereof.~~

41. The method of claim 25, wherein the candle body further includes a hydrocarbon oil in the candle base material.

42. The method of claim 25, wherein the candle body further includes an additive in the candle base material.

43. ~~The candle of claim 42, wherein the additive is an antioxidant, stabilizer, fragrance, colorant, insect repellant, or a mixture thereof.~~

44. The method of claim 25, wherein the candle body further includes an object.

45. ~~The candle of claim 44, wherein the object is an insoluble star, glitter, sparkle, ribbon, or a combination thereof~~

46. The method of claim 25, wherein the candle is free-standing.

47. ~~The method of claim 25, wherein the candle is contained in a jar.~~